

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in this patent application:

Claims 1 to 14 (canceled).

15. (currently amended) A method for treating a fabric, including de-sized fabrics and previously bleached hydrophilic fabrics, wherein the fabric includes threads oriented in a first fabric selected machine direction and threads oriented in a second fabric direction crossing the first fabric direction, wherein the threads oriented in the first fabric selected machine direction are made of natural or artificial cellulose fibers, and wherein the method comprises the steps of:

applying a metal peroxide to the fabric so that the fabric is impregnated with the metal peroxide, while leaving the fabric free and without tension in the first fabric selected machine direction and while placing the fabric under tension in the second fabric direction, for a period of time necessary for swelling of the fibers oriented in the first fabric selected machine direction and for modification of the fibers;

passing the impregnated fabric in air, while leaving the fabric relaxed and without tension in the first fabric selected machine direction and while placing the fabric under tension in the second fabric direction, swelling the threads

oriented in the first fabric ~~selected machine~~ direction and causing the threads to assume a spring shape, after shrinkage,  
at least one rinsing of the fabric;  
at least one washing of the fabric; and  
at least one squeezing of the fabric.

16. (currently amended) The method of claim 15 wherein the first fabric ~~selected machine~~ direction is a weft or a warp.

17. (previously presented) The method of claim 15 wherein the metal peroxide is caustic soda at 14 to 25° Baumé.

18. (previously presented) The method of claim 17 wherein the metal peroxide is in alkaline contact with the fabric for a period of time less than 5 minutes.

19. (previously presented) The method of claim 15 which, following the impregnation, further includes at least one vigorous squeezing of the fabric, followed by the relaxation of the fabric passing in air.

20. (currently amended) The method of claim 15 wherein the threads oriented in the first fabric ~~selected machine~~ direction are formed of artificial fibers.

21. (currently amended) The method of claim 20 wherein

the threads oriented in the first fabric ~~selected machine~~ direction are formed of Tencel®.

22. (currently amended) The method of claim 15 wherein the threads oriented in the first fabric ~~selected machine~~ direction are formed of natural fibers.

23. (currently amended) The method of claim 22 wherein the threads oriented in the first fabric ~~selected machine~~ direction are formed of linen.

24. (currently amended) The method of claim 15 wherein the fabric has a construction that allows the threads oriented in the first fabric ~~selected machine~~ direction to swell.

25. (withdrawn-previously presented) A machine for treating a fabric using the treatment method of claim 15 and which successively comprises:

an impregnation station including a tank containing a metal peroxide;

at least a first squeezing station;

at least a first relaxation station;

at least one washing station;

a final squeezing station;

a rolling-up station; and

controls for regulating a speed of progress of the

fabric through the machine, for managing the duration of the impregnation with caustic soda and the duration of the relaxation in air.

26. (withdrawn-previously presented) The machine of claim 25 which further includes a direction-changing roller following the first relaxation station.

27. (withdrawn-previously presented) The machine of claim 26 wherein the direction-changing roller is located in a tank containing the metal peroxide.

28. (withdrawn-previously presented) The machine of claim 25 which further includes a second squeezing station following the first relaxation station.

29. (withdrawn-previously presented) The machine of claim 28 which further includes a second relaxation station following the second squeezing station.

30. (withdrawn-previously presented) The machine of claim 29 which further includes a rinsing station following the second relaxation station.

31. (withdrawn-currently amended) A cellulose-based fabric having threads in a first fabric ~~selected machine~~

direction which are comprised of cellulose fibers that are not naturally elastic and threads in a second fabric direction crossing the first fabric direction, wherein the threads in the first fabric direction and which are rendered elastic by impregnation with a metal peroxide while leaving the fabric free and without tension in the first fabric selected-machine direction, to modify the cellulose and give the threads shape memory, and while placing the fabric under tension in the second fabric direction.

32. (withdrawn-previously presented) The cellulose-based fabric of claim 31 wherein weft threads are rendered elastic by the impregnation with the metal peroxide, and which further includes a straight warp which is tensed, so that the weft threads are undulated and fixed in a spring state.

33. (withdrawn-previously presented) The cellulose-based fabric of claim 31 wherein warp threads are rendered elastic by the impregnation with the metal peroxide, and which further includes a straight weft which is tensed, so that the warp threads are undulated and fixed in a spring state.

34. (withdrawn-previously presented) The cellulose-based fabric of claim 31 which is obtained using the method of claim 15.

35. (withdrawn-new) The machine of claim 25 wherein the fabric has threads in a first fabric direction which are comprised of cellulose fibers that are not naturally elastic and threads in a second fabric direction crossing the first fabric direction, and wherein the impregnation station leaves the fabric free and without tension in the first fabric direction and places the fabric under tension in the second fabric direction.

36. (withdrawn-new) The machine of claim 35 wherein the relaxation station leaves the fabric free and without tension in the first fabric direction and places the fabric under tension in the second fabric direction.